

Installing tcp_wrappers_7.6

ITOS Edition

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Making tcp_wrappers_7.6

Get 'tcp_wrappers_7.6.tar.gz' from a trusted site, such as
`ftp://ftp-nasirc.nasa.gov/toolkits/UNIX/TCP_Wrappers/tcp_wrappers_7.6.tar.gz`.

Let `$DISTDIR` be the directory containing 'tcp_wrappers_7.6.tar.gz'; let `$WORKDIR` be the directory where you'll build tcp_wrappers. Then:

```
# cd $WORKDIR
# tar zxvf $DISTDIR/tcp_wrappers_7.6.tar.gz
# cd tcp_wrappers_7.6
```

Edit 'Makefile'. Uncomment the appropriate `REAL_DAEMON_DIR`; find an appropriate system name (i.e. `sunos5` for Solaris, `freebsd` for FreeBSD, `SysV.4` for Linux). For Linux the line should read '`REAL_DAEMON_DIR=/usr/sbin`'. Uncomment the '`STYLE = -DPROCESS_OPTIONS`' line. Run '`make system-name`' or, if that fails, try '`make CC=gcc system-name`'.

You've made tcp_wrappers; now you're ready for installation and configuration!

Installation

Unfortunately the 'Makefile' only compiles and links the tcp_wrappers tools, it doesn't install them.

Let `$SBINDIR` be the directory where 'tcpd', 'tcpdchk', 'tcpdmatch', 'safe_finger' and 'try-from' gets installed. On Solaris, this is either '/usr/sbin' or '/usr/local/sbin'. On FreeBSD, this is '/usr/libexec'. On Linux it is '/usr/sbin'.

Let `$LIBDIR` be the directory where 'libwrap.a' gets installed. This is typically '/usr/local/lib'. On Linux it is '/usr/lib'.

Let `$INCDIR` be the directory where 'tcpd.h' gets installed. This is typically '/usr/local/include'. On Linux it is '/usr/include'.

Let `$BANNERS` be the directory where your banners get installed. We use '/etc/banners', for example.

Finally, let `$MANDIR` be the directory where man pages get installed. Usually '/usr/local/man'.

```
# cd $WORKDIR
# cp tcpd tcpdchk tcpdmatch safe_finger try-from $SBINDIR
# cp libwrap.a $LIBDIR
# cp tcpd.h $INCDIR
# cp *.3 $MANDIR/man3
# cp *.5 $MANDIR/man5
# cp *.8 tcpdmatch.8 $MANDIR/man8
# mkdir $BANNERS/allow $BANNERS/deny
# cp Banners.Makefile $BANNERS/allow/Makefile
# cp Banners.Makefile $BANNERS/deny/Makefile
```

Configuration

`/etc/inetd.conf`

In `/etc/inetd.conf`, change lines like

```
ftp stream tcp nowait root /usr/sbin/in.ftpd in.ftpd
```

to

```
ftp stream tcp nowait root /usr/sbin/tcpd in.ftpd
```

Do this for each service you want controlled by `tcpd`, the `tcp_wrappers` daemon. We typically control `ftp`, `telnet`, `shell`, `login`, and `exec`.

Either reboot the computer or send a HUP to the `inetd` process for these changes to take effect.

`/etc/banners/`

We make two directories, `/etc/banners/allow` and `/etc/banners/deny` where we place the banner messages `tcp_wrappers` displays. Using two directories allows us to have one banner for connections that are allowed and a different banner for connections that are denied.

Then, create a `'prototype'` in each directory. These could look like:

```
# cat /etc/banners/allow/prototype
U.S. GOVERNMENT COMPUTER
If not authorized to access this system, disconnect now.

YOU SHOULD HAVE NO EXPECTATION OF PRIVACY
By continuing, you consent to your keystrokes and data content being monitored.

# cat /etc/banners/deny/prototype
U.S. GOVERNMENT COMPUTER
If not authorized to access this system, disconnect now.

YOU SHOULD HAVE NO EXPECTATION OF PRIVACY
By continuing, you consent to your keystrokes and data content being monitored.

Access denied to %c

#
```

Finally, run `make` in each directory:

```
# cd /etc/banners/allow
# make or possibly 'make CC=gcc'
# cd /etc/banners/deny
# make or possibly 'make CC=gcc'
```

/etc/hosts.deny and /etc/hosts.allow

Here's how we do it; there are lots of variations and you should read *man hosts_access* and *man hosts_options* before creating these files:

```
'/etc/hosts.deny':
```

```
ALL: ALL: banners /etc/banners/deny
```

```
'/etc/hosts.allow'
```

```
in.rlogind: friend1,friend2,...: banners /etc/banners/allow
```

```
in.telnetd: friend1,friend2,...: banners /etc/banners/allow
```

```
in.ftpd: friend1,friend2,...: banners /etc/banners/allow
```

```
sshd sshd fwd-X11: friend1,friend2,...
```